



## D-2000 SERIES DIGITAL MIXING SYSTEM

DIGITAL MIXING PROCESSOR  
UNIT:

D-2008SP

MODULES:

D-2000AD1

D-2000DA1

D-2000CB



## HIGHLIGHTS

### D-2000 Series:

*Integrating high-performance mixing, matrixing and processing functions to meet a wide scope of sound reinforcement applications.*

*Expandable to a **maximum** system configuration of **128 combined inputs and/or outputs**, the D-2000 Series includes various modules and peripherals that can be combined to create the best possible sound in small to medium sized venues, including; hotel banquet and function rooms, indoor sports facilities, multi-purpose halls, places of worship and many other venues.*

\* AMX is a registered trademark of AMX Corporation.

\* Crestron is a registered trademark of Crestron Electronics, Inc.

\* CobraNet is a registered trademark of Cirrus Logic Corporation

### TOA CANADA CORPORATION

6150 Kennedy Road, Unit 3  
Mississauga, ON, L5T 2J4  
Phone: 1-800-263-7639 or 905-564-3570  
Fax: 1-800-463-3569 or 905-564-3569  
sales@toacanada.com  
www.TOAcANADA.com

### CREATING THE IDEAL SOUND ENVIRONMENT

#### Auto-Mixing Advantages

**NOM** (Number of Open Microphones) - automatically adjusts output level based on the total number of open microphones.

**Ducker function** (auto-mute function) - automatically works to attenuate outputs of channels with low priority.

#### Highly Effective Feedback Suppression

The D-2000 Series provides feedback elimination for up to 4 channels. In addition, each channel can control 12 problem frequencies. This makes it convenient for feedback suppression in different areas of the same hall.

**2 versatile suppression modes:** Either presettable **Auto Mode** or realtime **Dynamic Mode** can be selected to suit the situation and eliminate feedback.

#### Essential Audio Processing

Delay, High-Pass, Low-Pass and Notch Filters, Parametric Equalizers, Compressor/Auto Leveller, Gate, Crossovers and Crosspoint Gain.

### USER-FRIENDLY DESIGN FACILITATES OPERATION BY ANY USER

#### 32 Preset Memories for User Convenience

Up to 32 different routing and parameter configurations can be stored in memory and called up to handle venues such as multi-purpose halls and conference rooms that require frequent changes in staging, seating and speaker arrangements.

#### Intuitive GUI

The dedicated software's graphic, visually attractive user interface helps streamline settings and adjustments.

#### VCA Control

D-2000 Series units used in conjunction with the optional D-911 VCA Fader Unit provides an analog mixer user interface.

#### RS-232C Control

The RS-232C port allows external control when connected to external devices such as AMX\* and Crestron\* control units. This also allows full control over the venue from a central remote location. This feature is particularly suited for AV presentation rooms, conference rooms and hotel banquet rooms.

### CONFIGURATION FLEXIBILITY AND INTELLIGENT FUNCTIONS PROVIDE SOLUTIONS FOR ANY SITUATION

#### User-Specific Configurations

The D-2000 Series fully modular design makes it a simple matter to create a configuration that meets specific user requirements.

#### 24-Bus Matrix

Flexible input-to-output signal routing for zoning or room-combining as required.

#### Extending Operational Use for More Advanced Applications

A 128 combined input and/or output system can be constructed by connecting four units of the D-2008SP using the CobraNet\* module. LAN-connected D-2008SP units can be remotely operated from TOA's PC software.

## INPUT MODULES

### Mic/Line Input Modules (Monaural Type)



#### D-2000AD1

- 4-channel, XLR connectors
- A/D converter: 24 bit
- Phantom power supply (48V)
- THD: 0.008% or less



#### D-921E

- 2-channel, removable terminal block
- A/D converter: 24 bit
- Phantom power supply (15V)
- THD: 0.05% or less



#### D-921F

- 2-channel, XLR connectors
- A/D converter: 24 bit
- Phantom power supply (15V)
- THD: 0.05% or less



#### D-922E

- 2-channel, removable terminal block
- A/D converter: 20 bit
- Phantom power supply (15V)
- THD: 0.05% or less



#### D-922F

- 2-channel, XLR connectors
- A/D converter: 20 bit
- Phantom power supply (15V)
- THD: 0.05% or less

### Mic/Line Input Modules (Stereo Type)

#### D-936R

- 4-channel, RCA pin jack
- A/D converter: 24 bit
- THD: 0.05% or less



### Digital Input Modules

#### D-923AE

- 2-channel line input
- Applicable Format: AES/EBU



#### D-937SP

- 1-channel stereo line input
- Applicable Format: S/PDIF



## OUTPUT MODULES

### Line Output Modules



#### D-2000DA1

- 4-channel, XLR connectors
- D/A converter: 24 bit
- THD: 0.008% or less



#### D-971M

- 4-channel, XLR connectors
- D/A converter: 24 bit
- THD: 0.05% or less



#### D-971E

- 4-channel, removable terminal block
- D/A converter: 24 bit
- THD: 0.05% or less



#### D-971R

- 4-channel, RCA pin jack
- D/A converter: 24 bit
- THD: 0.05% or less

### Digital Output Modules



#### D-961SP

- 2-channel stereo line output
- Conaxial RCA jack
- Applicable Format: S/PDIF



#### D-972AE

- 4-channel line output
- XLR connectors
- Applicable Format: AES/EBU

## REMOTE CONTROL MODULES

### Remote Control Modules

#### D-981

- 8 inputs/8 outputs
- Allows custom panels
- Removable terminal block connectors



#### D-983

- 24 inputs/16 outputs
- Allows custom panels
- RJ-45 connectors



### VCA Control Module

#### D-984VC

- Interface to D-911 Remote Controller
- Allows custom panels
- Eight RJ-45 connectors
- Control up to 12 inputs, 8 outputs



### CobraNet Interface Module

#### D-2000CB

- Allows audio transmission among D-2008SP's.



\*CobraNet\* was developed by Cirrus Logic, a US company, and is network protocol utilizing Ethernet networks to perform high-quality multi-channel digital transmission. It allows using existing Ethernet equipment such as CAT-5 switching hubs.

\*CobraNet is a registered trademark of Cirrus Logic Corporation

### VCA Fader Unit

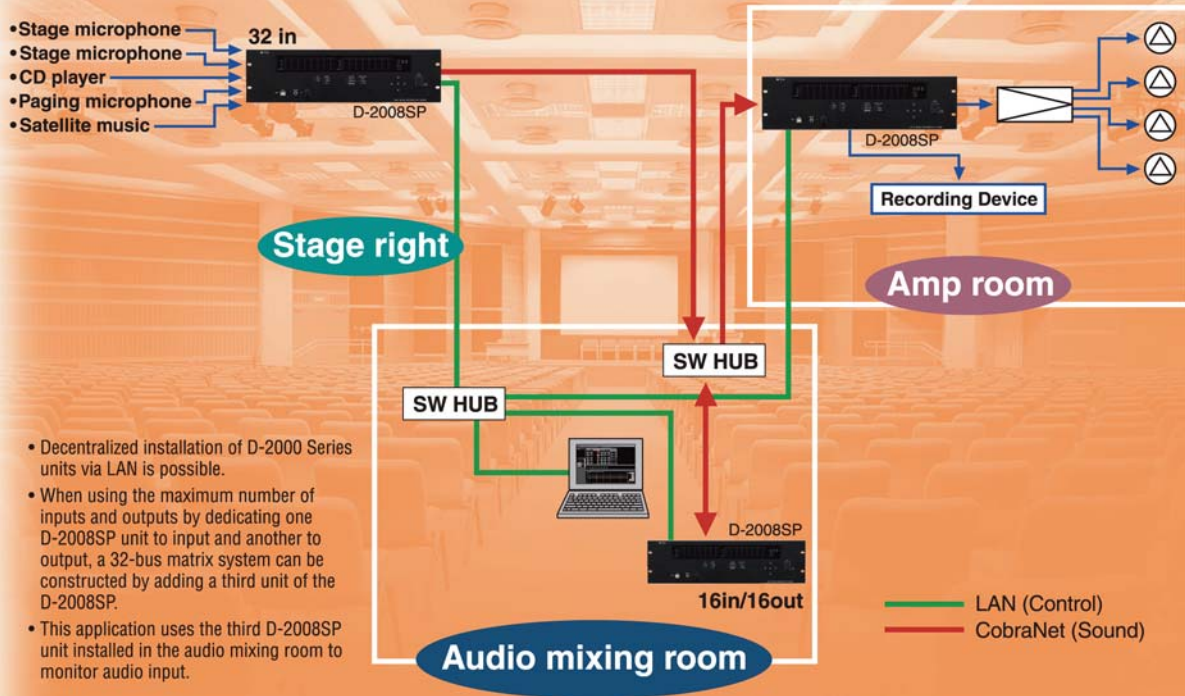
#### D-911

- VCA Fader Unit for controlling 12 inputs/8 outputs, channel gains and 8 contact controls when used with the D-984VC.

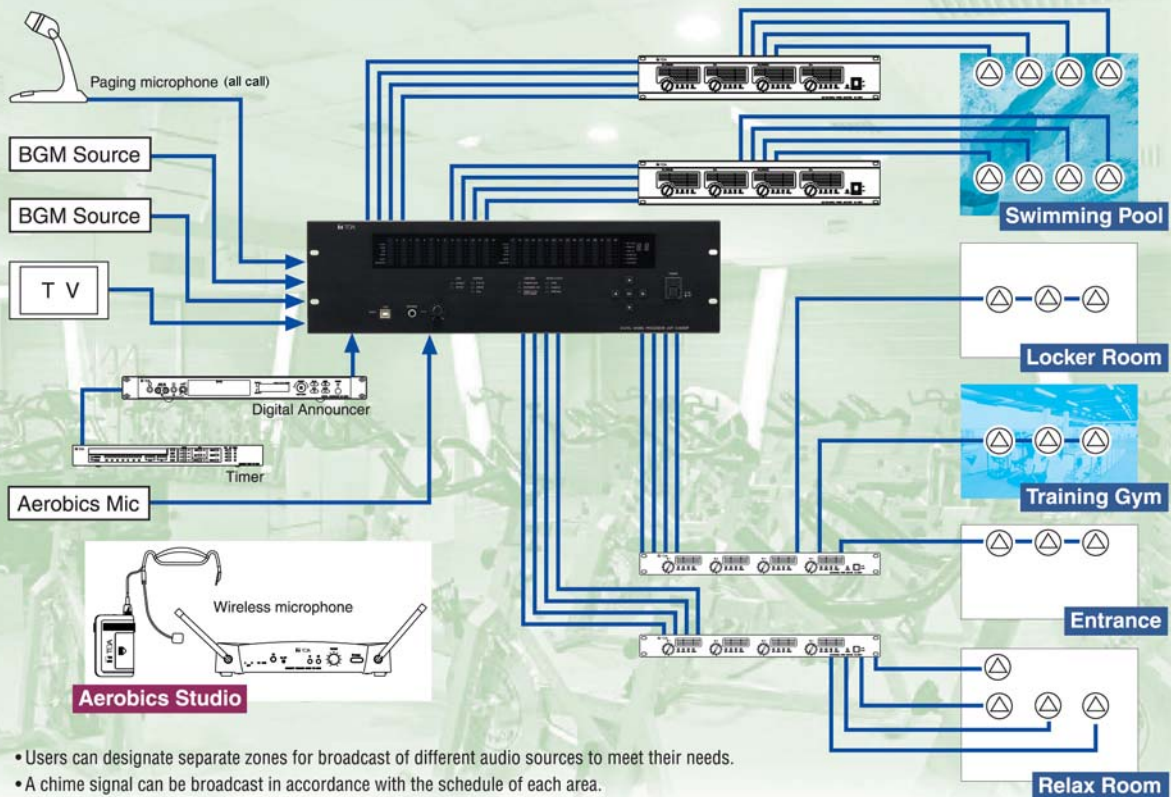




## Municipal Hall Application



## Fitness Club Application



# D-2000 SERIES DIGITAL MIXING SYSTEM

## SPECIFICATIONS

### ► D-2008SP - Digital Mixing Processor Unit

Power Source	AC Mains, 50/60Hz
Power Consumption	76W
Frequency Response	20Hz - 20kHz, $\pm 1\text{dB}$ ( $\pm 4\text{dB}^{\dagger}$ Input)
Sampling Frequency	48kHz
Input and Output	Input Max: 32 channels, modular construction (modules optional) (expandable to max. 128) Output Max: 32 channels, modular construction (modules optional) (expandable to max. 128) Monitor Bus: 1 stereo input, 1 stereo output Headphone: 1 stereo
(Note: Max. System Configuration: 32 (128 with 4 x D-2000SP) combined inputs and/or outputs)	
Signal Processing	Feedback Suppression Function, Auto Mixing Function, Auto Mixing Group, Parametric Equalizer High-Pass Filter, Low-Pass Filter, Notch Filter, All-Pass Filter, High Shelving Filter, Low Shelving Filter, Horn Equalizer, Crossover Filter, Compressor/Auto-Leveler, Output Delay, BUS Delay, Matrix, CobraNet* Matrix, Crosspoint Gain
Preset Memory	32
Auxiliary Function	Key locking function
LAN	Network I/F: 10BASE-T/100BASE-TX (automatic-negotiation) connected via a switching hub Network Protocol: TCP/IP Connection Cable: shielded category 5 or higher twisted pair LAN cable (CAT-5-STP) Maximum Cable Distance: 100m (109.36yd) (between D-2008SP and switching sub)
Control	RS-232C, D-sub connector (9 pins) used for external control Module: remote control module slot:2
Operating Temperature	+5°C to +40°C (41°F to 104°F)
Dimensions	482 (W) x 132.6 (H) x 343.4 (D) mm, (18.98" x 5.22" x 13.52")
Weight	6.3kg (13.89 lb)
Accessory	Power cord (2m (6.5 ft) x 1, Rack mounting screw x 4, Module mounting screw (spare) x 4, Blank panel (preinstalled on the module slot) x 8, CD (set-up software) x 1

### Personal Computer Requirements

Personal Computer	PC-AT compatible
Personal Computer Requirements	CPU: Pentium4* 2GHz or more Memory: 1.5GB or more (2GB or more recommended) Display Adapter: XGA (1024 x 768) or more Network Adapter: 10BASE-T or more
OS	Windows Vista*, Windows* XP (SP2) or later
Other	.NET Framework 3.5 SP1 (included on the supplied CD) installation required

### ► D-2000AD1 Mic/Line Input Module

Input	4 channels, Mic/Line selectable Mic: -50/-36dB <sup>†</sup> , 2.6k $\Omega$ , electronically-balanced Line: -10dB <sup>†</sup> , 2.6k $\Omega$ /+4dB <sup>†</sup> , 7k $\Omega$ , electronically-balanced Connector: XLR-3-31 equivalent Phantom power supply (48V DC can be used when set for the Mic) Ground lift switch
A/D Converter	24 bit
THD	0.008% or less (+4dB <sup>†</sup> input)

### ► D-2000DA1 Line Output Module

Output	4 channels, +4dB <sup>†</sup> /-10dB <sup>†</sup> (changeable), adaptable load of 600 $\Omega$ or more, balanced (electronically-balanced)/ unbalanced (changeable), XLR-3-32 equivalent
D/A Converter	24 bit
THD	0.008% or less

### ► D-2000CB CobraNet\* Interface Module

Network I/F	CobraNet*: 100BASE-TX, PRIMARY/SECONDARY 2 system, RJ45 connector, enables decentralized installation. (audio transmission only) Connection Cable: shielded twisted pair (STP) CAT-5 or higher LAN cable (note: this network should be completely independent of other LAN.) Number of D-2008SP Connection: Max. 4 Switching Sub Stage: Max 7 Max Extend Distance: 100m (328.1ft) (connected via a switching hub)
Input	16 channels, 20/24 bit
Output	16 channels, 20/24 bit

<sup>†</sup> 0dB= 0.775V

\* Pentium is a registered trademark of Intel Corporation

\* Windows, Windows Vista is a registered trademark of Microsoft Corporation

\* CobraNet is a registered trademark of Cirrus Logic Corporation

